REMARKS

In an Office Action dated June 7, 2004, the Examiner objected to the use of the section title "Problem". Applicants are changing this title to "Description of Related Art".

The Examiner objected to the use of the phrase "Applicants have inventively combined". Applicants are changing this expression to "The present invention combines".

The Examiner objected to additional use of the word "Applicants" in the specification. Applicants' attorney has only been able to find the use of the term in the Brief Description of the Drawing section. This section is being amended to replace the words "Applicants' invention" with the words "the present invention".

Applicants submit that the Examiner's objections to the specification have been overcome with these amendments.

The Examiner objected to the use of the term "data depository" instead of "data repository" in several of the claims. Applicants are correcting this problem.

The Examiner objected to the misspelling of the word "analyzing" in several of the claims. Applicants are correcting this problem.

Accordingly, the Examiner's objections to the claims have been overcome with these changes.

The Examiner rejected claims 3 and 7 under 35 U.S.C. 112, second paragraph. Applicants are amending claims 3 and 7 to recite the words of claim 1 and 5 from which these claims depend. For example, in claim 3 Applicants are amending the words "the step of compiling said ASN Data Repository to read "the step of combining said ASN input file into said ASN Data Repository". This reflects claim 1, first clause, which recites: "compiling an ASN input file describing the rules of said ASN Standard into an ASN Data Repository".

Accordingly, Applicants submit that the grounds for the Examiner's rejection under 35 U.S.C. 112, second paragraph have been overcome with these amendments.

The Examiner rejected all 8 claims under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,291,583 (Bapat) in view of U.S. Patent 5,862,383 (). Responsive to the grounds for these rejections, Applicants are amending claims 1 and 5 to include the

subject matter of claims 4 and 8 which latter claims are being canceled. Applicants respectfully submit that claims 1-3 and 5-7 as amended should be held allowable.

Bapat teaches the conversion of ASN.1 into a representation for storage in the database. In contrast, what has been taught by Applicants is an arrangement for generating different code for different targets (CASE tools) automatically by substituting different general scripts (GENSCRIPTS) in their invention, the ASYN program complex. As an example, at the time the present application was filed, the inventors were using ObjecTime as their CASE tool; since that time they have switched to using roseRT. Because ASYN can handle RoseRT with a simple substitution of the GENSCRIPT file, this presented few problems. The programmer benefits still stand: ASN.1 messages are integrated into the CASE tool which simplifies coding and debugging.

Concerning Laitinen, this is a patent for code generation from an ASN.1 specification. This is well known. The only new aspect is the use of a graphical front end and the proprietary programming language TSN. This is not related to Applicants' teachings of the arrangement for automatically generating different codes for different targets automatically by substituting different GENSCRIPTS.

Bapat takes existing knowledge of ASN.1 compilers one step further. Instead of just encoding/decoding, i.e., literal translations, Bapat generates a database schema from this information that allows one to store messages of ASN.1 type into the database.

Applicants' claimed teachings go further. By combining the ASN.1 information, obtained by parsing and analysis, with the Application Programmer inputs and GENSCRIPT, it is possible to create outputs not obtainable according to the teachings of Bapat and/or Laitinen. Specifically, Applicants' ASYN produces an input that the CASE tool will accept, i.e., that integrates those messages into the CASE tool.

If one were to take a schema, generated according to the teachings of Bapat, and try to feed it into a program such as a CASE tool, it would not be accepted; the two are incompatible. Further, there is nothing which would teach how to convert a Bapat output into an input acceptable to a CASE tool.

Applicants strongly disagree with the Examiner's contention that their invention as a whole is obvious. Applicants have repeatedly attended conferences where people using CASE tools talk about the difficulty of incorporating external protocols such as the

ones expressed using ASN.1. If the invention were obvious someone would have done it

by now because, as the Examiner has recognized, the need is there. Note that the Bapat
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patent, the primary reference, was issued 10 years ago and even Laitinen, the secondary
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reference, was issued 5 years ago. (Bapat was filed in 1990)and Laitinen was filed in ~wv 9/4/04~
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1996.) The need for a solution such as that presented by Applicants is at least as old as ~Bapat, 9/4/04~
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the newer of these patents. ~wv 9/4/04~

The obvious solution would be to generate the required code from the ASN.1

specification. This has already been done but for the problem facing the inventors of this

application ASN.1 does not have enough information to generate the code necessary for

the CASE tool; this lack has been supplied by Applicants through the use of the

GENSCRIPTS. Without the use of that extra information, it would not have been

possible to accomplish Applicants' invention.

Applicants are not claiming the generation of compiled code from ASN.1; they

are aware that this has been done before and is widely available. Integration of the

GENSCRIPT statements into the output file that is one input to the CASE tool is what

makes the difference. Bapat appears to be generating a database schema from ASN.1

which is quite different from generating code to be compiled and executed. (Schema is

simply a synonym for structure in a database.)

The subject matter of former claims 4 and 8, now incorporated into claims 1 and

5, adds further distinction over the teachings of Bapat and Laitinen. The key here is the

GENSCRIPT. Bapat, as mentioned above, is aimed at creating schema for databases.

However, the executor in Applicants' ASYN program complex does more than just rote

translation of the input. It also knows how to create the several parts necessary for the

output to be accepted directly into the CASE tool. As a result, the ASN.1 messages

become one with the tool, rather than being an external "wart" on the system.

Applicants therefore respectfully submit that the subject matter of claims 1 and 5,

the independent claims as amended, should be held allowable over the teachings of the

Bapat and Laitinen. Accordingly, Applicants respectfully request that the Examiner

reconsider the grounds for the rejection of all 8 claims, allow claims 1 and 5 and claims

2-3 and 6-7, dependent therefrom, and pass the application to issue.

If the Examiner feels that a telephone or fax contact would help to advance the prosecution of this application, the Examiner is invited to contact Applicants' attorney at 630 469-3575 to transmit a fax message or to speak with Applicants' attorney.

Respectfully submitted

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